Texas Commission on Environmental Quality (TCEQ)
Texas Natural Gas Vehicle Grant Program (TNGVGP)
Manufacturer Information Request Forms (TCEQ 20609a-f)
Instructions for Completion and Submission
Revised - August 1, 2017

Purpose

The Texas Natural Gas Vehicle Grant Program (TNGVGP) is established under Texas Health and Safety Code (THSC), Chapter 394, to be administered by the Texas Commission on Environmental Quality (TCEQ). The TNGVGP is one of several incentive programs under the Texas Emissions Reduction Plan (TERP) to reduce nitrogen oxides (NO_x) emissions in certain areas of the state. This request for information is to help the TCEQ implement the TNGVGP.

The TCEQ offers the opportunity for engine and vehicle manufacturers to provide information to assist the TCEQ in compiling a list of new vehicles and engines, and systems for conversion of vehicles and engines, eligible for funding under the Texas Natural Gas Vehicle Grant Program (TNGVGP).

The TNGVGP will provide grants to eligible projects to replace existing medium-duty and heavy-duty vehicles with new vehicles powered by compressed natural gas (CNG), liquefied natural gas (LNG), or liquefied petroleum gas (LPG). The replacement project may include purpose-built alternative fuel vehicles and engines and may also include new vehicles and engines converted to operate on an eligible fuel.

The TNGVGP will also provide grants to eligible projects to repower an existing vehicle with an eligible engine operating on an eligible fuel or to convert the existing engine to operate on one of the eligible fuels.

Projects must result in a reduction in nitrogen oxides (NO_x) emissions of at least 25%, based on the federal emissions standard or family emissions limit (FEL) of the original vehicle/engine and the replacement vehicle/engine.

For dual-fuel engines operating on a combination of diesel fuel and the eligible fuel, the engine must be capable of at least 60% displacement of diesel fuel in dual-fuel mode (i.e., 60% natural gas + 40% diesel). Manufacturers of dual-fuel engines must establish to the TCEQ's satisfaction that an engine or conversion system is capable of displacing at least 60% diesel fuel use when operating in dual-fuel mode.

For purposes of this request, a respondent must be the manufacturer of the vehicle, engine, or conversion system, certifying to compliance with federal NO_x emissions

standards. Other entities should not complete the forms. However, as explained in the instructions, the respondent completing the forms should work with other applicable entities, as needed, to compile any cost information requested in the forms.

For more information about the program requirements and timing for the grants, please visit the program web site at <www.terpgrants.org>, or contact Mr. Ron Hieser of the grants staff at (800) 919-TERP (8377).

Vehicle and Engine Eligibility

Replacement Projects

To be eligible for a replacement project, the replacement vehicle and engine must be new. New vehicles and engines may be purpose-built to operate on CNG, LNG, or LPG, or may be converted to operate on CNG, LNG, or LPG using a system issued a Certificate of Conformity (COC) by U.S. Environmental Protection Agency (EPA) for conversion of that new vehicle or engine model and model year.

In order to be eligible to be included in the list, new vehicles and engines must meet certain eligibility requirements, as outlined below.

Eligible New Chassis-Certified Vehicles

An eligible new vehicle must:

- have a gross vehicle weight rating (GVWR) of 8,501 lbs. or more;
- be a purpose-built or converted new on-road motor vehicle that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation; and
- be certified by the EPA to meet or exceed the current emissions standards for chassis-certified heavy-duty vehicles and vehicles classified as a Medium-Duty Passenger Vehicle.

For a Medium Duty Passenger Vehicle certified under the previous Bin designations, the vehicle must be certified to BIN 5 or better. Under the new 2018 BIN designations, the vehicle must be certified to a BIN with a NO_x emissions standard equivalent to the previous BIN 5 standards or better.

A Class 2b heavy-duty chassis-certified vehicle (8,501 - 10,000 lbs. GVWR) must be certified to emit 0.2 grams/mile NO_x or better, while a Class 3 heavy-duty chassis-certified vehicle (10,001 - 14,000 lbs. GVWR) must be certified to emit 0.4 grams/mile NO_x or better. Under the new Tier 3 standards, these emission standards correspond to Bin 395 (interim) for Class 2b vehicles and Bin 630 (interim) for Class 3 vehicles.

Bi-fuel chassis-certified vehicles, capable of operating separately on an eligible fuel or gasoline, are not eligible.

Eligible New Heavy-Duty Engines

An eligible new heavy-duty engine must:

- be intended for installation on *new* heavy-duty vehicles with a GVWR of 8,501 lbs. or more;
- be a purpose-built new heavy-duty engine that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation; and
- be certified by the EPA to emit not more than 0.2 grams of NO_x per brake horsepower-hour (bhp-hr).

Bi-fuel engines, capable of operating separately on an eligible fuel or gasoline, are not eligible.

Note, TCEQ does not anticipate that there will be any systems certified by the EPA for conversion of a *new* diesel engine to operate on an eligible fuel, or in combination with the eligible fuel and diesel fuel in dual-fuel mode. However, if a manufacturer has developed such a system and has received EPA certification for conversion of a new engine, contact TERP staff and staff will evaluate the eligibility of an engine converted using that system in a new vehicle.

Repower Projects

A repower project may include the replacement of the engine on an existing vehicle over 8,501 GVWR with a different eligible engine or may include conversion of the vehicle or engine with an eligible conversion system.

A project must result in a reduction in NO_x emissions of at least 25%. Any conversion system must be certified by the EPA to a NO_x emissions standard or FEL that is at least 25% lower than the emissions standard or FEL of the original vehicle/engine.

Certified Engines

A heavy-duty engine eligible for replacing an existing engine must:

- be intended for installation on an existing heavy-duty vehicle with a GVWR of 8,501 lbs. or more;
- be a purpose-built heavy-duty engine that operates on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation; and
- be certified by the EPA to emit not more than 0.2 grams of NO_x per brake horsepower-hr (bhp-hr).

Bi-fuel engines, capable of operating separately on an eligible fuel or gasoline, but not in combination (dual-fuel), are not eligible.

Certified Heavy-Duty Engine Conversion

A conversion system eligible for converting an existing engine or replacing an existing engine with the converted engine must:

- be intended for installation on an existing heavy-duty vehicle with a GVWR of 8,501 lbs. or more;
- be intended to convert a heavy-duty engine to operate on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation; and
- be certified by the EPA to emit not more than 0.2 grams of NO_x per brake horsepower-hr (bhp-hr).

Bi-fuel engines, capable of operating separately on an eligible fuel or gasoline, but not in combination (dual-fuel), are not eligible.

Certified Vehicle Conversion Systems

A conversion system eligible for converting an existing chassis-certified vehicle must:

- be intended for conversion an existing chassis-certified heavy-duty vehicle or medium-duty passenger vehicle with a GVWR of 8,501 lbs. or more;
- be intended to convert the vehicle to operate on CNG, LNG, or LPG, or in combination with diesel fuel and capable of at least 60% displacement of diesel fuel use in dual-fuel operation; and
- be certified by the EPA to meet or exceed the current emissions standards for chassis-certified heavy-duty vehicles and vehicles classified as a Medium-Duty Passenger Vehicle. For a Medium Duty Passenger Vehicle certified under the previous BIN designations, the vehicle must be certified to BIN 5 or better. Under the new 2018 BIN designations, the vehicle must be certified to a BIN with a NO_x emissions standard equivalent to the previous BIN 5 standards or better.

Bi-fuel chassis-certified vehicles, capable of operating separately on an eligible fuel or gasoline, are not eligible.

Acceptance of Test Data

The EPA has established regulations under Title 40 Code of Federal Regulations (40 C.F.R.) Part 85 for a manufacturer of a system to convert a vehicle or engine to operate on a clean alternative fuel to obtain exemption of the conversion system from the tampering prohibition in Clean Air Act Section 203(a) (42 U.S.C.

7522(a)). The regulations establish provisions pertaining to exemptions for conversion of New and Relatively New vehicles/engines, Intermediate Age (IA) vehicles/engines, and Outside Useful Life (OUL) vehicles/engines.

Under the provisions pertaining to New and Relatively New vehicles/engines, as established in 40 C.F.R. §85.510, manufacturers must test the converted vehicles or engines using the same procedures as required for certification of new vehicles and engines under 40 C.F.R. Part 86 and 40 C.F.R. Part 1065. For approved systems, the EPA will issue a COC for the conversion. A manufacturer may choose to test systems for conversion of IA or OUL vehicle/engines under the same provisions and request that EPA issue a COC for that system. In some cases, a manufacturer may also request that EPA certify the system to a more stringent emission standard.

Under the Repower category, in cases where a conversion system is not certified to the current federal emissions standard, the TCEQ may consider, case-by-case, whether the results of testing conducted for certification or acceptance of the system by the EPA demonstrates that the system results in a NO_x emissions rate consistent with the current NO_x emissions standards.

Tests conducted for certification by the California Air Resources Board (CARB) may also be considered.

Under this alternative acceptance provision, the testing used to obtain the emissions data must have been consistent with the testing required for EPA approval of an alternative fuel conversion system for New and Relatively New vehicles/engines under 40 C.F.R. §85.510, including testing under the primary Federal Test Procedure (FTP).

Form Instructions

Only the Original Equipment Manufacturer (OEM) of natural gas vehicles, engines, or conversion systems may submit the TNGVGP Information Request Forms to the TCEQ, which can be downloaded from our website, <www.terpgrants.org>, and filled out electronically. Entities not listed as the manufacturer on the EPA (COC) should not complete the forms. However, as explained in the instructions, the respondent completing the forms should work with other applicable entities, as needed, to compile the capital cost information requested in the forms.

Depending on the type of natural gas vehicle, engine, or conversion system being submitted for consideration, the respondent will choose from one of six Manufacturer Information Request Forms (Forms 20609a-f). Each of the six forms includes a Contact Information page and an Equipment Information page. All respondents must first select the appropriate Information Request Form, complete and sign the Contact Information page, and fill out as many copies as necessary of the Equipment Information page for all of the eligible models manufactured by the OEM.

If you need more space for any of the forms or need any clarification, please contact the TCEQ before submitting the forms. You may submit forms for the various models in one mail package as opposed to a separate package for each model, but be sure that you bind together the relevant forms for each model. You may also fax or scan and email the forms to the TCEQ.

Submission

Each separate mail package, fax, or email must include its own completed and signed Form 1 - Contact Information page.

Mail to:

Regular Mail:

Ron Hieser Texas Commission on Environmental Quality Air Quality Division Implementation Grants Section (TERP Grants), MC-204 Texas Natural Gas Vehicle Grant Program P.O. Box 13087 Austin, TX 78711-3087

Express Mail:

Ron Hieser
Texas Commission on Environmental Quality
Air Quality Planning Division
Implementation Grants Section (TERP Grants), MC-204
Texas Natural Gas Vehicle Grant Program
12100 Park 35 Circle
Austin, TX 78753

Fax to:

Please use a cover sheet and send to 512/239-0077, Attn: TNGVGP Info Request.

E-mail to:

Please include the phrase "TNGVGP Info Request" in the subject line and send to Ron.Hieser@tceq.texas.gov.

Submission Deadlines

The TCEQ will accept submissions on a continuous basis as vehicles, engines, or conversion systems are certified by the EPA.

Manufacturer Information Request Forms

Each of the following six Manufacturer Information Request Forms (20609a-f) includes a Contact Information page (Form 1) and an Equipment Information

page (Form 2). All respondents must determine the correct Manufacturer Information Request Form, and then complete Form 1 – Contact Information and Form 2 – Equipment Information. With Form 1 – Contact Information, the entity will identify a contact person for the response and all the information contained within, and provide background information on your company or entity. With Form 2 – Equipment Information, the entity will provide detailed information about the natural gas vehicle, engine, or conversion system being submitted for consideration.

Form 20609a - New Chassis-Certified Vehicles

Form 20609a should be used for purpose-built new chassis-certified vehicles powered by CNG, LNG, or LPG and certified to the current federal emissions standard. This form should <u>not</u> be used for vehicles that are originally manufactured to operate on gasoline or diesel fuel, even if the conversion of the vehicle may occur through a flow-through process prior to first sale of the vehicle.

Chassis-certified vehicles include chassis-certified vehicles classified as Medium Duty Passenger Vehicles under EPA requirements, between 8,501 and 10,000 lbs. GVWR, and heavy-duty vehicles between 8,501 and 14,000 lbs. GVWR that are chassis-certified by the EPA.

Form 20609b - New Heavy-Duty Engines

Form 20609b should be used for purpose-built new heavy-duty engines powered by CNG, LNG, or LPG and certified by the EPA to the current federal emissions standard.

Form 20609c - Chassis-Certified New Vehicle Conversion Systems

Form 20609c should be used for systems to convert a new chassis-certified vehicle after initial manufacture as part of a flow-through process before first sale of the new vehicle. The converted vehicle must be certified by the EPA to the current federal emissions standard.

Form 20609d – Existing Engine Conversion Systems

Form 20609d should be used for systems to convert an older existing heavy-duty compression ignition diesel engine to operate on an eligible fuel or a combination of the eligible fuel and diesel fuel (dual-fuel). The converted engine must be certified by the EPA to the current federal emissions standard under the provisions of 40 C.F.R. Part 85, under which a manufacturer may request that EPA certify the conversion system to a more stringent standard than the emission standard of the engine(s) being converted.

Form 20609e – Chassis-Certified Vehicle Conversion Systems not Certified to the Current Federal Emissions Standard

Manufacturers of systems to convert an older existing chassis-certified vehicle under the repower category may submit information about the system in Form 20609e. The conversion must result in a reduction in NO_x emissions of at least 25% compared to the un-converted vehicle.

Under the Repower category, in cases where a conversion system is not certified to the current federal emissions standard, the TCEQ may consider whether the testing conducted for certification or acceptance of the system by the EPA demonstrates that the system results in a NO_x emissions rate consistent with the current federal NO_x emissions standard.

Under this provision, the testing used to obtain the emissions data must have been consistent with the testing required for EPA approval of an alternative fuel conversion system for New and Relatively New Vehicles/Engines under 40 C.F.R. §85.510.

In most cases, if a manufacturer of a conversion system for IA or OUL vehicles/engines has performed the level of testing required for approval for conversion of New and Relatively New vehicles/engines, the manufacturer will request that EPA issue a COC for that IA or OUL conversion system. If a COC is issued by the EPA, provide that with the test data. If possible, a manufacturer should request that EPA include the certified test results on the certificate.

In addition, if the manufacturer has received an Executive Order (EO) from CARB certifying the vehicle or engine to the California requirements, the certified test results should be listed on the EO. That EO should be also be provided.

The test results for the tests conducted under the required FTP should be provided, as well as the results of other tests requested/required by EPA or CARB. Documentation provided to the EPA or CARB, such as the test report from an independent testing facility outlining those results should be included.

The TCEQ will evaluate the FTP test results, in conjunction with review of the results of other tests, to determine if the NO_x emissions results are consistent with levels that would likely be necessary for EPA approval to the current federal NO_x emissions standard.

Note, for systems to convert a diesel engine to use both diesel fuel and one of the eligible fuels in dual-fuel operation, the test results must demonstrate that the converted engine meets the current federal NO_x emissions standard in both diesel-only mode and dual-fuel mode.

Form 20609f – Heavy-Duty Engine Conversion Systems <u>not</u> Certified to the Current Federal Emissions Standard

Manufacturers of systems to convert an older heavy-duty diesel or gasoline engine under the repower category, either by converting the existing engine on the vehicle or removing and replacing the engine with a converted engine, may submit information about the system in Form 20609f. The repower must result in a reduction in NO_x emissions of at least 25% compared to the un-converted vehicle.

Under the Repower category, in cases where a conversion system is not certified to the current federal emissions standard, the TCEQ may consider whether the testing conducted for certification or acceptance of the system by the EPA demonstrates that the system results in a NO_x emissions rate consistent with the current federal NO_x emissions standard.

Under this provision, the testing used to obtain the emissions data must have been consistent with the testing required for EPA approval of an alternative fuel conversion system for New and Relatively New Vehicles or Engines under 40 C.F.R. §85.510.

In most cases, if a manufacturer of a conversion system for IA or OUL vehicles/engines has performed the level of testing required for approval for conversion of New and Relatively New vehicles/engines, the manufacturer will request that EPA issue a COC for that IA or OUL conversion system. If a COC is issued by the EPA, provide that with the test data. If possible, a manufacturer should request that EPA include the certified test results on the certificate.

The test results for the tests conducted under the required FTP should be provided, as well as the results of other tests requested/required by EPA. Documentation provided to the EPA, such as the test report from an independent testing facility, outlining those results should be included.

The TCEQ will evaluate the FTP test results, in conjunction with review of the results of other tests, to determine if the NO_x emissions results are consistent with levels that would likely be necessary for EPA approval to the current federal NO_x emissions standard.

Note, for systems to convert a diesel engine to use both diesel fuel and one of the eligible fuels in dual-fuel operation, the test results must demonstrate that the converted engine meets the current federal NO_x emissions standard in both diesel-only mode and dual-fuel mode.